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RESEARCH ARTICLE

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## MULTIDISCIPLINARY PATIENT CARE AFTER TREATMENT OF ACUTE MYOCARDIAL INFARCTION

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### ABSTRACT

The objective was to analyze the scientific production on multidisciplinary care for patients after treatment of Acute Myocardial Infarction. **Methodology:** Trata-se de um estudo bibliográfico, que visa apontar indicadores cada vez mais confiáveis. As buscas foram realizadas nas bases de dados National Library of Medicine, Latin American and Caribbean Health Sciences Information System, Virtual Scientific Electronic Library Online, Web of Science e Scopus, atualizadas em abril de 2022. Descriptors used: Patient Care Team; Myocardial Infarction; Cardiology; Interdisciplinary Research, being selected at the end 42 articles. Content analysis was used. Two categories emerged: Multidisciplinary patient care in cardiology and Post-treatment of Acute Myocardial Infarction. **Results:** In view of the 42 selected articles, a concern with the early identification of risk factors was identified; creation of strategies to reduce hospital readmission and outline care plans according to national and international literature, however, in Brazil the approach is insufficient. **Conclusion:** There is broad engagement in the development of strategies by the multidisciplinary team to reduce hospital readmission.

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## INTRODUCTION

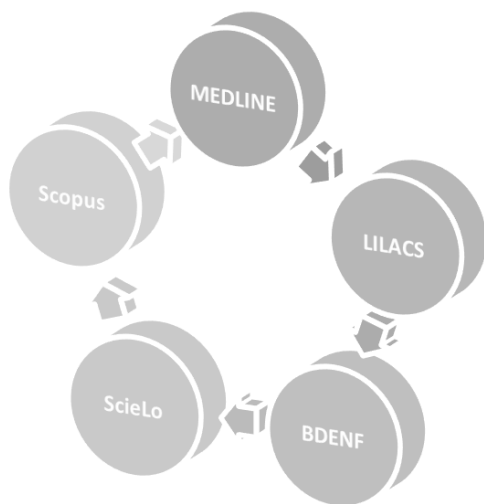
Acute coronary syndromes (ACS) correspond to the vast majority of fatal cardiovascular events. In Brazil, AMI is responsible for 30% of deaths, with a higher occurrence in the age group of 60 years, characterized by myocardial ischemia caused by the reduction or total interruption of coronary blood flow due to coronary atherosclerosis

with occlusion of the coronary arteries, thus causing deficits in physiological, social and work conditions, with consequent low quality of life [1]. According to the World Health Organization (WHO) 75% of cardiovascular mortality can be reduced with lifestyle changes. For this, the intervention of a multidisciplinary team on a continuous basis is necessary, implementing strategies to control modifiable risk factors such as smoking and obesity, thus promoting primary prevention [2, 3]. In Brazil, Primary Health Care (PHC) is

the main gateway and communication center of the Health Care Network. This network aims to improve the access and effectiveness of the Unified Health System. In addition to organizing the flow of patients, PHC must also be responsible for the user at all points in the network, thus producing shared and continuous care. In this sense, the effectiveness of the referral and counter-referral system, articulation and communication between services, constitutes the main element for the integration of health care networks [4, 5]. For the effectiveness of care, PHC must present essential attributes such as continuity and longitudinality. In this sense, the maintenance of multidisciplinary follow-up after treatment of AMI is essential to avoid complications and a new infarction. In this context, the multidisciplinary team plays a fundamental role, working in the elaboration of strategies to improve the quality of life, change in eating habits and adherence to drug treatment [6]. In this way, the relevance of identifying the evidence available in the national and international literature on multidisciplinary patient care after treatment of acute myocardial infarction is highlighted, with a view to highlighting relevant care strategies that favor health preservation and permanent follow-up to the patient, in order to avoid aggravation of the state of health. The objective was to analyze the scientific production on multidisciplinary care for patients after treatment of Acute Myocardial Infarction. Therefore, the objective of this study is to analyze all theoretical-methodological-scientific reference available about the care of the multiprofessional team for the patient after acute myocardial infarction.

## MATERIALS AND METHODS

**Demonstrative graphic of database used in the methodological course:** This is a study with data collection carried out from secondary sources, through a bibliographic survey, it is one of the best ways to start a study, looking for similarities and differences between the articles raised in the reference documents, under the assistance of multidisciplinary approach to the patient after acute myocardial infarction [7].



The compilation of information in electronic media is a great advance for researchers, democratizing access and providing frequent updates. The general purpose of a research literature review is to gather knowledge about a topic, helping to lay the foundations of a meaningful study for nursing. This task is crucial for researchers [8]. To search for articles in the literature, a search was carried out in the following databases: Latin American and Caribbean Literature on Health Sciences (LILACS), Medical Literature Analysis and Retrieval System on-line (Medline), ScieLo, Base of Nursing Data (BDENF) and Scopus. The following descriptors and their combinations in Portuguese and English were used to search for articles: "Patient Care Team"; Myocardial Infarction; Cardiology; Interdisciplinary Research. The inclusion criteria defined for the selection of articles were: articles published in Portuguese, English and Spanish; full articles that portrayed the theme referring to the

bibliographic review and articles published and indexed in the aforementioned databases in the last ten years [9]. For this literature review, all scientific studies related, within the time period, to multiprofessional care for patients after acute myocardial infarction and its boundaries were accepted. The methodological course followed all the programmed deliberations to the letter [10].

## RESULTS AND DISCUSSION

**Risk factors associated with complications after acute myocardial infarction treatment:** In order for the continuity of care for patients in the rehabilitation phase to be consolidated, it is necessary to survey risk factors for possible complications, as they may support the planning of appropriate interventions/actions. In this perspective, patients with AMI, with out-of-hospital cardiac arrest, have a higher risk of cardiogenic shock, heart failure, recurrent cardiac arrest, major bleeding and need for red blood cell transfusion compared to AMI survivors without out-of-hospital cardiac arrest, but it does not interfere in mortality [11, 12]. Studies were identified that mention Infarction, Heart failure and Pneumonia as conditions sensitive to hospital readmission. These conditions increase the risk of readmission within 30 days. In this sense, the reduction in readmission is attributed to the improvement in discharge planning and care transitions. Accordingly, the time required for the daily risk of readmission to decrease by 50% requires 20 days after hospitalization for AMI, which suggests the importance of minimizing vulnerability to these specific conditions, through planning and post-discharge follow-up. Thus, the data reinforce the premise that monitoring the patient after AMI treatment allows health professionals to understand the individual's ability to adapt to the new health condition, whether with functional, emotional limitations or even adherence to therapy drug [13, 14, 15]. The multidisciplinary team can help in several aspects, whether therapeutic or curative, but not only centered on the person, but on the individual as an important exponential factor. In this way, it is necessary to enable assistance networks for the specific relocation of each specialty, in this case, cardiology [16, 17, 18, 19].

**Strategies of the multidisciplinary team to help reduce hospital readmission rates after infarction treatment:** To reduce readmission rates after treatment of the acute phase, it is essential to adopt strategies aimed at longitudinal care, based on the main complications existing after treatment of AMI. As a strategy to reduce readmission rates, the relevance of medical follow-up is evaluated to qualify the continuity of care after hospital treatment of AMI, however, only one study carried out in China identified this relationship with the decrease in readmission in 30 days [20]. Another method evidenced by the multidisciplinary team was the implementation of programs to reduce hospital readmission, focused mainly on the transition of care after the acute phase of AMI. In Japan, there was a national investigation regarding the applicability of a program that aims to establish a connection between the acute phase and the management of the disease in the chronic phase for AMI, however, the offer of outpatient cardiac rehabilitation was only 18%, the that could compromise the improvement of the long-term prognosis [21, 22, 23]. Managements to prevent complications associated with medication adherence were developed by pharmacists who structured counseling programs after hospital discharge. In this context, we aimed to assess the impact of a drug therapy management program provided by pharmacists on readmission rates at 29 days 47 after discharge. The program consists of conducting a face-to-face consultation with the patient, where a health education will be developed, clarifying the effects of the medication and about the warning signs that indicate that the health status is deteriorating. One week later the pharmacists followed up again in person or by phone and after all drug recommendations were communicated to the primary care physician via fax [24, 25]. Patients in the intervention group were significantly less likely to experience a readmission using this program. Thus, the transmission of patient information from the inpatient setting to the community pharmacy is essential for a successful patient transition. Accordingly, we analyzed a discharge

counseling program, conducted by a pharmacist, which consisted of consultations with patients or their caregivers 30 days after discharge, also focused on health education, including questions about doses, dosage schedule, duration of therapy and possible adverse events. Subsequently, patients were contacted by telephone by the same pharmacist 3 and 15 days after discharge, to reinforce the previous counseling session [26, 27]. The program demonstrated many benefits as patients had fewer pharmacotherapy problems in the 30 days post-discharge, mainly related to medication administration and adherence. To decrease the risk of readmission and mortality, control the prevalence of risk factors including clinical barriers related to patient and treatment smoking, low-density lipoprotein cholesterol, blood pressure, obesity, exercise and diabetes. The study concluded that it is possible to improve the risk profile of many patients with the introduction of relatively simple measures, such as measuring blood pressure and nicotine replacement therapy, assisting in the smoking cessation process, in addition to referral to cardiac rehabilitation programs [28, 29]. In line with this, a study was carried out in France on the effect of prescribing Cardiac Rehabilitation (CR) on five-year mortality in patients with acute myocardial infarction after discharge, showing that the prescription of CR substantially reduced mortality. Therefore, the study concluded that, mainly drugs and CR, in addition to reducing mortality, improve quality of life and reduce the number of hospital readmissions. It is estimated that if the infarcted patient receives adequate and early treatment, he may benefit from lower risks of complications, such as heart failure. Accordingly, with regard to follow-up after treatment, it is believed that the rigor of this attention and the targeting of the real needs of the individual can also be a differential, with a significant improvement in the prognosis [28, 29].

## CONCLUSION

This study achieved its objective insofar as it analyzed the relevant scientific publications, with regard to multidisciplinary care for patients after acute myocardial infarction, with scientific articles available in national and international databases, enabling the creation of new relevant studies. on this theme and of a fundamental character for multiprofessional collaborations. When analyzing the productions that made up the sample of this study, a broad engagement of the multiprofessional team was evidenced in the elaboration of strategies to reduce hospital readmission, as well as outlining care plans. It was found that the application of risk factor prediction models presented satisfactory results, as it allowed the identification of patients with an unfavorable prognosis, helping in the planning of interventions and adequate prevention measures, which favors their survival. Regarding the decrease in hospital readmission rates, the creation and implementation of programs aimed at the transition of care after the acute phase of AMI was identified as the main strategy, contributing to the effectiveness of the continuity of care. In this context, it was also observed that in order to establish continuity of care, periodic consultations need to be maintained, as well as adequate counseling and management of drug therapy, since studies have shown that most of the patients' problems were focused on adherence to the medicines.

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